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ABSTRACT

The third party evaluation examines the activities of the 1974-75 school year. Results of the evaluation are organized around four major areas of interest: student self-concept, career awareness, student attitudes toward career development, and teacher use of career education resources. Evaluation instruments used with the students were self-observation scales, an Occupation Awareness Survey, and the Career Maturity Inventory (for grades 10-12). Teachers were asked to complete the Career Education Teacher Practices Survey. Detailed in the report are a description of the career education program, the conceptual basis for the evaluation (information based evaluation), test results, a cost analysis, and conclusions and recommendations. The evaluation team recommended that information gathered should be considered as baseline data for future planning and evaluation, and that continuing structured feedback should be obtained from teachers, students, and the community. (RG)

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FINAL EVALUATION REPORT
FOR THE
BEDFORD COUNTY
CAREER EDUCATION PROGRAM
BEDFORD, VIRGINIA

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PREFACE

This is the final evaluation report for the second year evaluation of the Bedford Career Education Program, Bedford Virginia. Though this document is prepared by IBEX, much of the contents are the result of an evaluation design conference with the Bedford project and school staffs. The Program Description section was prepared by the Project Staff. The cooperation given by the Project Director, Mr. Jerry Turpin, and his staff to the Evaluation Team deserves a special thanks. They have been most helpful and cooperative throughout the evaluation effort. The administration of the evaluation assessment battery was the responsibility of the participating teachers. They were most cooperative.

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SECTION I. EXECUTIVE SUMMARY AND RECOMMENDATIONS

The U.S. Office of Education requires that all Part D Vocational Exemplary Projects have an independent third part evaluation. In response to a request for proposals from the Bedford County Schools, IBEX, Inc. submitted a proposal in September, 1974 and was selected to perform the evaluation.

The evaluation activities began in January, 1975 with a design conference in Bedford. This conference set the parameters for the evaluation and specified the roles to be played by IBEX and Project staff in carrying out the evaluation functions.

The IBEX evaluation team was headed by Dr. Hugh T. Peck, and included Dr. Helmuts Feifs, Senior Consultant, Mr. Steve Davis and Mr. Steve Schulz of the IBEX staff.

The evaluation of the 1974-75 year of the Bedford Career Awareness Project was designed by IBEX, Incorporated, the independent third party evaluator, in compliance with the USOE Guidelines and with the close cooperation of the Project staff. Many of the evaluation functions were carried out directly by IBEX, while others were performed by the Project staff and the results reviewed by the IBEX evaluation team.

The evaluation design for the 1974-75 year of the Project is summarized in Section III of this report.

Responsibility for the various evaluation functions was divided between IBEX and the Project staff, since much of the data collection and record-keeping was integral to the implementation of Project activities.

The results of the evaluation are organized around four major information domains or evaluation areas of interest. These domains are: (A) student self concept, (B) student awareness of the world of work, (C) relationships between self concept, ability and achievement, and (D) teacher use of career education resources and related practices.

The major results of the 1974-75 Evaluation are summarized in the following paragraphs. A detailed presentation of the results of IBEX's evaluation is found in Section V.

The importance of a healthy self concept is well recognized. As a measure of children's self concepts, the Self Observation Scales (SOS) were employed in this evaluation.

Over 400 students took the SOS. The overall results show that the sample population closely approximates the national norming group. Differences between the Project Participant and non-Participant groups showed a favored pattern for Participants at the Primary Level (K-3) and Intermediate Level (4-6).

The Occupational Awareness Survey (OAS)*, developed by IBEX, was used to assess how students perceive the world of work and their relationship to it.

*The Occupational Awareness Survey was substituted for the Career Education Questionnaire (CEQ), due to the publisher's inability to provide the requested number of instruments.

The survey is scored by job, not by student, and a review of OAS scores (grades 2-6) reveals a good deal about the knowledge and values of the students. Although not all job clusters are represented in the survey, the students' relative ranking of jobs presents a picture of the world of work as seen through the students' eyes.

Jobs at the extremes of the rankings are interesting. The "Cook at McDonald's" was predictable for the younger children, as was the "Park Guide at Disney World". At the Elementary Level, "Teacher" and "Game Warden" were unexpectedly high, and these jobs remained high on the list at the Secondary Level. The highest ranking at the Secondary Level was "Computer Programmer".

The results at each grade level were studied to determine whether any trends existed. Generally, the scores did not show significant grade level trends. However, a few jobs showed a rise in score with grade: "Sales Person", "Accounts Payable Clerk" and "Doctor" (at the Elementary Level). Other jobs showed declines: "Minister", "Sanitation Worker" and "Waitress".

Overall, the OAS provided a great deal of information regarding the students' perceptions of the world of work and their relation to it, and the results should be useful in planning career education activities at all levels of the program.

The Teachers' Practices Survey was designed to obtain feedback directly from teachers regarding their use of 15 specific techniques and activities related to career education.

The results of the survey were summarized by estimating the average number of times each activity was used by the responding teachers during the school year.

Many of the activities, such as "integration of basic skills with career education", "Career Education materials" and "displays concerning careers and jobs" were used more frequently than once per week.

At the low end of the scale were "use of library resources related to careers", "visits to self-employed persons" and "visits to factories or plants".

The results of this survey generally support the Project documentation regarding the use of career education materials and activities, and they present a picture of the implementation patterns which have evolved.

SECTION II. PROGRAM DESCRIPTION

Career Education Now!-Model for Career Education Curriculum, K-14 for a Rural-Urban School District is the culmination of Bedford County's previous experience in the field of career education. Prior to the implementation of this program, Bedford County Public Schools had many elements of career education already integrated into its curriculum and program of studies. While the results of these individual programs were salutary, what was needed was a way to fuse these programs into a unified effort which would maximize the benefits which students received. Bedford County realizes that career education should be a comprehensive, instructional program which begins in the kindergarten and extends through the adult years. In light of this realization, Bedford County Schools is committed to developing and making a functional reality, a relevant Career Education Curriculum, K-14.

A major emphasis of this program is the development of a curriculum and the providing of services that provided opportunities for career awareness in K-6, and career orientation and career exploration in grades 7 and 8. Career Education Resource Persons in Grades K-7 employed in the program assisted in meeting these objectives. The Work-Experience Coordinator and the Project Supervisor assisted in improving existing services and instructional opportunities in the program.

Bedford County Schools has implemented a program of nine-week exploratory courses for seventh and eighth grade pupils in selected schools. These include exploration in agricultural science and mechanics, art, business education and typing, French, home economics, music, public speaking and Spanish. Each student is encouraged to explore a choice of four areas during the school year. The relationship of the exploratory courses to career clusters is emphasized in the introductory phase of each course. Exiting options from the related clusters are emphasized as students look at the various progressive levels of training for related occupations associated with the areas being explored.

The high school curriculum for grades nine through twelve has been developed to provide subject options which can lead to job preparation and placement to baccalaureate programs for exiting students. As with other school systems, the total realization of this goal is still to be obtained. This program provides for increased job preparation in a wider variety of occupational areas and utilizes varied work experience and cooperative education experiences for all students.

Other courses were planned for vocational-technical students who wish to complete job skill training for entry into jobs at the end of the twelfth grade in such programs as carpentry, drafting, electronics, occupational foods, practical nursing, etc. The Work-Experience Coordinator has strengthened the preparation

and experiences provided for these students exiting before graduation. The Project Supervisor and Work-Experience Coordinator provide a program of placement, follow-up, and research into community resources. These courses and personnel have enabled meeting the goal of insuring placement of all exiting students in either: (a) a job, (b) a post-secondary occupational program, (c) a baccalaureate program.

The program also serves to increase the self-awareness of each student, develops in each student favorable attitudes about the personal, social and economic significance of work, and assists each student in developing and practicing appropriate career decision-making skills.

Bedford County Public Schools has developed an extensive continuing education program including numerous night classes which allows employed persons to earn some academic high school credits, obtain schooling in basic education, secure an equivalency of a high school education certificate, and acquire vocational-technical skills.

The preceding was a description of the major features of the program during its first year. This year and next, Bedford County Schools will attempt to fill one important "gap" in the total program. There is a need for the potential dropout or disadvantaged (educationally or economically or socially) student to acquire some form of job-level entry skill training during the ninth and tenth grade years of schooling. This will be provided

by a special program taught in skills laboratories by special teachers. The academic subject approach for these students will become career education-oriented during the first year of the project. With this revised approach, disadvantaged students during the second year of the project will take relevant academic work at our base high schools. During a three-hour block of time, selected disadvantaged students will be taught job-entry skills at the Bedford Educational Center which is centrally located. This phase of the project is reflected in an increased budget for this and the next year's program.

The following are elements of new concepts and innovations involved in the Bedford program:

a. Role of the Career Education Resource Person -- The "career resource person" in this project provides support to the educational process in a variety of ways to both students and teachers. Assistance is given to teachers in local elementary schools as the career resource person aids in curriculum development, K-7 and helps teachers integrate career education into language arts, mathematics, science, and social studies. Through group guidance, he will assist elementary students to move toward self-awareness, develop healthy attitudes toward work, and provide the background help to assist children with developing career decision-making skills. Individual counseling is emphasized in order to assist students with individual problems and to make satisfactory

adjustments as they move through elementary school experiences.

b. The Career Resource Person also assists in introducing initial career orientation and selected meaningful exploratory experiences to pupils in grades 4-7. Selected experiences that develop hands-on-skills will be introduced by the skills teachers. Working with teachers, he or she helps grade level teachers to develop units involving activity-centered experiences that assist the student in seeing the relevance between science, mathematics, language arts, and social studies and career goals.

c. Role of the Work-Experience Coordinator -- The work-experience coordinator assists in the placement of students in cooperative education experiences in grades 11-12. He assists working students in placement that avoids "dead-end" types of work that merely provide financial rewards while the student is attending school and working part-time under no formal program. The work-experience coordinator also assists in curriculum development and serves as a resource person to bring community resource people into academic classrooms to help teachers make subject matter more relevant to pupils in grades 11-12.

d. Revised Approach to Exploratory Courses -- In this program, exploratory courses provide students in grades 7 and 8 with experiences that will enable them to develop career and educational decision-making skills as well as providing opportunities in the development of simple skills related to some of the fifteen career clusters.

e. Role of the Project Supervisor -- The project supervisor provides a rural-urban school division with services not generally found in this type of school district. He coordinates the work of secondary guidance counselors to insure placement of all exiting students in either a job, post-secondary occupational program, or a baccalaureate program. Follow-up and research studies are coordinated by this professional worker.

f. Inservice Program for Restructuring the Curriculum Around the Career Education Theme -- All elementary and secondary instructional personnel in Bedford County Public Schools received inservice training to move the program of studies toward a K-14 total career education concept.

g. Integration of Local Adult and Continuing Education Program Into the Career Education Model -- This program provides for movement through the K-12 program of studies into designed programs equivalent to Grades 13 and 14 provided through local adult and continuing education programs.

h. Role of Skills Teacher for Disadvantaged Students -- The skills teacher for disadvantaged students works with selected potential dropouts and disadvantaged students at the ninth and tenth grade levels.

The Bedford County Public Schools program differs from traditional programs in that it combines many elements of career education into a Model for Career Education K-14. The traditional approach to implementing career education in a school district has been to concentrate on a fairly narrow grade area such as K-6, 7-8, 9-10, etc., rather than setting up a complete program embracing the total curriculum K-14. This program is one in which all five phases of career education -- career awareness, career orientation, career exploration, skill development, and post-high school options are put into effect at one time. Through the proposed three-year period of the project, the model should be developed to the point of making career education a reality in Bedford County Public Schools. The fact that Bedford County is partly rural in nature with many urban elements, should prove to be an advantage for an exemplary project in that the model would be more adaptable to different types of school districts.

SECTION III. CONCEPTUAL BASIS FOR EVALUATION

The strategy upon which this evaluation report builds is called Information Based Evaluation (IBE)*. This strategy has been successfully implemented on some forty projects at both the state and local level over the past three years.

The concept of information utility is the overriding characteristic that differentiates "good" evaluation from "poor" evaluation and differentiates undisciplined data collection from information gathering. Judged by even modest standards of utility educational research and evaluation has a pitifully poor record and the unfortunate educational manager or policy maker operating within this void must sift through mountains of data for those kernels of desired information.

In the social sciences in general, and in education in particular, the mechanisms do not exist for supplying information to those that need it. The traditional evaluation mechanism has not added much to the meager research contribution. Theoretically, evaluation should be a suitable mechanism but it has suffered from growing pains and an obsession to separate itself clearly from the research model. The Information Base Evaluation model, hopefully, suffers from no such obsessions,

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* A. Jackson Stenner, Information Based Evaluation Series Book 1: An Overview of Information Based Evaluation: A Design Procedure. Arlington, Virginia. IDEA Corp. 1972.

except perhaps that of adhering strictly to the concept of information utility.

Another contributing factor to the inadequacy of present day evaluations has been the relationship between evaluation and the performance objectives movement. The symbiotic growth these two concepts have enjoyed has served to reduce the full potential of educational evaluation. The crucial role performance objectives play in program management are obvious; however, the question arises as to what place objectives should have in evaluation. The Information Based Evaluation approach view program objectives as a focus of evaluation activity, but by no means the focus. More traditional approaches to evaluation have used performance objectives as the foundation for the planning and execution of evaluation activities. This procedure is considered inadequate for several reasons:

1. Basing evaluation on performance objectives restricts the focus of evaluation to intended outcomes, thus overlooking unintended outcomes which are potentially just as important.
2. Performance objectives provide a very inflexible basis for evaluation in that they are seldom changed during the program year, and thus information needs (which are fluid) cannot be adequately addressed.
3. Even if information on the attainment of all performance objectives is provided, important information is invariably ignored because objectives are not developed with

information needs in mind, but rather are developed as guideposts for program management.

4. Objectives based evaluation often views each objective as a unique area of focus and thus important relationships are often overlooked.

If program objectives are inadequate as a foundation for evaluation, what are the alternatives? How do we define the parameters of evaluation, i.e., what are the reference points? In objectives based evaluation, the reference points are the program objectives. In information based evaluation the reference points become the information users for the program and the information domains (needs). Capitalizing on these two reference points, a technique called domain analysis can be used to define and focus the direction of the evaluation.

Information based evaluation should not be considered as "objective free" evaluation. Information based evaluation recognizes the importance of program objectives, but only to the extent to which feedback on the objectives is considered important to information users. The overriding considerations is the type of questions about which relevant individuals desire answers. Priorities are established in both the information domain category (e.g., student cognitive growth) and the information user category (e.g., local superintendent) and the evaluation resources are expended to meet these identified priorities. An additional check on the adequacy of evaluation information is the extent to

which the information leads to action. If no relationship exists between information and action, then the adequacy and/or quality of the evaluation effort is in doubt.

In polling the various information users, the evaluation team can often develop evaluation questions that relate to "unintended outcomes" or "shadow benefits". These questions occur because all information users are probably not supportive of the program procedures and/or objectives; thus, their information needs will highlight aspects of the program that would not receive attention in an objectives based evaluation effort. Program developers and program staff generally have a highly developed commitment for the program and are myopic in viewing the outcomes of the program. The possibility that the program may cause some negative side effects is very difficult for them to comprehend, let alone accept. However, individuals or factions that have been against the program from the start are generally more than capable and willing to identify potential weaknesses and unintended outcomes. Therefore, in serving each information user, the evaluation team can gain a balanced view of the program.

Information based evaluation recognizes that an evaluation must be dynamic if it is to be responsive. Program objectives rarely change during the project year, thus the objectives based evaluation is static and methodical in responding to the information requirements. Information based evaluation accepts the fact that information needs are fluid, and new questions are posed throughout the program cycle.

Section IV. Information Needs

Information Based Evaluation (IBE) rests on three major components: information users, information domains and evaluation questions. At the evaluation design conference with the Bedford staff, these three co,ponents were carefully viewed and given priority rank in the Career Education evaluations.

Information Users

Those who need or desire information about a particular project or program in the semantics of IBE are called information users. For the Bedford Career Awareness Program, the following priority list of users was adopted:

Action Users

Project Staff

Teachers

Counselors

School Administrators

Support Users

Superintendent

School Board

State Department of Education

USOE

Interest Users

Parents

Business and Industrial Community

Lay Community

Professional Community

Higher Education

Information Domains

A general area of concern for project or program staff and participants is called an information domain. For this project the following list of domains was adopted:

Students

(1) Career Awareness

(2) Self Concept

(3) Work Attitudes

Teacher Evaluation

(4) Career Information

(5) Career Education Attitude

(6) Career Education Implementation

Evaluation Questions

The following list of evaluation questions attempted to blend the directions from the S.O.E. Guidelines with evaluation questions that were adopted by the exemplary project. The Project Director and IBEX, as the evaluator, feel that we responded to the Guidelines and met the information needs of the Project and of the S.O.E. During the course of the evaluation, additional questions may arise

which can be answered with the available data elements; if so; they were added to the following list:

1. How did students change in relation to the six areas of emphasis in terms of knowledge, attitudes, and behavior? (Note the six areas of emphasis are: 1) career awareness and preparation, 2) self awareness and understanding, 3) economic awareness and understanding, 4) attitudes and appreciation, 5) educational awareness, and 6) decision making.

2. How do principals perceive the Career Education (CE) effort?

3. How do teachers perceive the CE effort?

4. How does the central administration perceive the CE effort?

5. How do these three groups and the CE staff see each other's professional role in the Career Education effort?

6. How did teacher involvement in the Career Education effort change?

7. To what degree do teachers infuse CE into their classroom activities and to what extent did the Planning Guide facilitate that infusion?

8. What teaching strategies advocated by CE (and at what level) are teachers utilizing in their classrooms? Do they show increased use of such strategies?

9. Is there an increase in the level of involvement of community resources in the learning process?

10. Was the community involvement effective?

11. Was the performance of the Career Education staff effective in the opinions of teachers, principals and other administrators in the following areas:

    conducting inservice;

    assisting with implementation;

    arranging resources?

12. How does project staff rate their own effectiveness during 1974-75?

13. How do members of the CE staff utilize their time?

Evaluation Constraints

No evaluation effort is devoid of constraints or limitations; thus, it was imperative that the constraints be considered from the beginning of the evaluation and the procedures be established to work within these constraints. Two major constraints, time and resources, are of primary importance.

For this evaluation effort, $6,800 of the gross budget was allotted. It was necessary to delete some desirable information needs to stay within this constraint. Principals agreed to one and one-half hours of student time during the Spring term. To meet this

constraint a modified sampling matrix using test, grade and class as variables, was adopted, thus all students did not take all tests. Each student had one hour to one hour and fifteen minutes of actual testing time.

All the students in the Bedford School District participate in the Career Education Project; therefore, no control was possible for the study. Finally, since Career Education is to be infused into the instructional program and not isolated as a specific area, the determination of cause and effect relationships will not be considered as a part of this evaluation.

Instrumentation

The evaluation instruments listed below were presented for the project staff consideration. The instruments utilized for the evaluation were the recommended instruments in the U.S.O.E. Guidelines. Each instrument is briefly described, its subscales noted. Complete copies of the instrument appeared in the Instrument Catalog. Instruments are arranged by audience groups.

Students

Self Observation Scales - A measure of student self-concept at the primary (K-3) and intermediate (4-6) levels. Scales include: Self Acceptance, School Affiliation, Social Maturity, Self Security, Achievement Motivation, Social Confidence, Peer Affiliation, and Teacher Affiliation. (SOS)

Self Observation Scales - A measure of student self-concept for secondary (7-12) pupils. Scales include Self Security, Social Maturity, Peer Affiliation, Teacher Affiliation, Family Affiliation, School Affiliation, Social Confidence, Self Assertion, and Self Acceptance. (SOS)

Occupation Awareness Survey - A new measure designed by IBEX and used to determine if the student is aware of career possibilities and if he sees dignity in all work. Score on items and item distribution rather than on students or class (OAS). Grades K-12.

Career Maturity Inventory - An instrument designed by the California Test Bureau to determine if students can relate social and academic skills learned in school to occupational requirements. (CMI)

Teachers

Career Education Teacher Practices Interview - A teacher interview guide to determine level of use by teacher of certain practices suggested by the Career Education effort. (CETPI)

Section V. Evaluation Results

This section is organized around four major information domains or evaluation areas of interest. These Domains are: (1) student self concept, (2) student relationships with the world of work, (3) student attitudes toward career development (4) teacher use of career education resources.

Student Self Concept

A first objective at the elementary level is to enable students to develop a more positive self concept and greater understanding of self.

Between the ages of five and twelve self concept begins to crystalize. During this period (termed the latency period by many authors), the child matures considerably in the physical, cognitive and affective areas. He confronts his environment with an increasingly stable set of feelings, attitudes and behaviors which are based, to a large extent, on his self concept which is likewise, stabilizing. As the child becomes older he becomes more sure of what he likes and dislikes, who he likes and dislikes, what he enjoys doing and what he dislikes doing, how he sees his future and what he will be doing in this future. He begins to plan and his aspirations and hopes tend to be consistent with the way he values himself, which, in turn, is dictated in large part by how he perceives others value him.

Although the early school years are characterized by a crystalization of self, the child also begins to differentiate. The self concept of the five-year-old is a relatively simple construct. The five-year-old views most things as a dichotomy: people are good

or bad, food is good or bad, places are happy or sad places to be, other children are friendly or mean. As the six-year-old enters first grade, new demands are placed on him. He is expected to interact with unfamiliar children and authority figures and, to a great extent, his well being is determined by how successfully he negotiates these new demands. It is these early school years that have a truly profound impact on the child's self concept development. Never before has he been consistently, objectively and sometimes coldly, judged by peers and adults. He is unable to separate himself from his actions so that reprimands and criticism often become viewed as direct threats to self. With this background information we now turn to the correlates of a positive and negative self concept, respectively.

The Positive Self Concept*

Children with positive self concepts are, first of all, confident about their ability to meet everyday problems and demands. They are confident about their relationships with other people and take pleasure in mutual interdependence, in needing others and in being needed. Autonomy and interdependence are beginning to take shape. Children with strong self concepts view themselves as desirable and valuable contributors to the well being of those around them. They see themselves as deserving of attention and love and feel they are capable of reciprocating. They compare themselves favorable with their peers and feel that authority figures are supportive and interested in them as individuals. These children tend to be comparatively independent

*The profiles for a"positive" and "negative" self concept are drawn from the results of the national validation and norming of the Self Observation Scales.

and reliable. These qualities may stem from their feelings of sufficiency and adequacy in new and challenging situations. They are relatively free from anxiety, nervousness, excessive worry, tiredness and loneliness. They report being happy with the way they look and would not change their appearance if they could.

Children with a positive view of themselves enjoy interacting with their peers and see themselves as on a par with their peers in most situations, while occasionally professing superiority in certain areas. They recognize the social consequences of certain "asocial" actions and see the benefits of give-and-take in social interactions. These children are able to admit that they make mistakes and that they sometimes hurt other people, but they apparently do not view these admissions as major threats to self.

Behaviorally, these children are seldom designated as problem children. They usually appear comparatively calm, keep their hands to themselves and although they are frequently competitive, they express aggression when external considerations warrant aggressive behavior. They express dissatisfaction with their own poor performances but relatively seldom make self deprecating remarks. They react positively to constructive criticism, can accept praise well, and derive obvious pleasure from a job well done.

Scholastically, children with positive self concepts tend to be above expectation in reading and mathematics. They tend to attain higher scores on standardized achievement tests than would be predicted from ability tests. These children are positive toward school and view it as a happy, worthwhile place to be.

The Negative Self Concept

Children with poor self concepts are insecure and pessimistic about their ability to meet everyday problems and demands and they are unsure about their relationships with others. They often tend to be either overly dependent and withdrawn or overly aggressive with apparently minimal overt needs for social interaction and, in each case, growth toward autonomy appears stunted and retarded. These children view themselves as undesirable and, through their often inappropriate behavior (which is, although inappropriate, usually quite consistent with the way the children feel about themselves), they are regularly reinforced in these feelings.* They report not being needed by significant others and do not feel that others care about them as individuals. They compare themselves unfavorably with their peers and frequently report being inferior to their peers in age-appropriate activities. Authority figures represent a threat to children with poor self concepts.

These children are threatened in social interactions and prefer to play with younger children. They report a desire to dominate in peer-oriented activities, i.e., always wanting to be first or always wanting to be the leader, and yet, would prefer to play alone if given a choice. They tend to be quitters and are satisfied with poor performance (again, poor performance is consistent with the way these children view themselves). These children find it difficult to admit to even common mistakes and are quite insensitive to other people's feelings.

*Modifying the truism from the financial world that "the rich get richer and the poor get poore", we can say that children with strong self concepts get positive reinforcement and, thus get stronger, while those with weak self concepts get negatively reinforced and thus, get weaker.

Behaviorally, these children are frequently labeled as problem children. The acting out, aggressive, verbally disruptive child has a markedly lower self concept than does the "healthy" child. Likewise, the insecure, withdrawn, quiet child also has a low self concept, but his inadequacies are manifested differently from the aggressive child. These children respond negatively to criticism and, surprisingly, they often respond inappropriately or even negatively to praise because positive feelings are inconsistent with the way these children feel about themselves.

Scholastically, children with poor self concepts tend to be below average in reading and mathematics. They tend to obtain lower scores on standardized achievement tests than would be predicted from ability tests. These children are negative toward school and view it as an unhappy place to be.

As a measure of children's self concepts, the Self Observation Scales (SOS) were used in this evaluation. The SOS is a direct, self report, group administered instrument comprised of fifty items at the primary level (K-3) and sixty items at the intermediate level (4-6).

The Primary level of the SOS measures five dimensions of children's self concept. Each scale is labeled in a positive manner with high scores being most characteristic of the scale name.
The scales are as follows:

Self Acceptance

Children with high scores view themselves positively and attribute to themselves qualities of happiness, importance, and general competence. They see themselves as being valued by peers, family and teachers. Children with low scores see themselves as unhappy, lacking in general

competence and of little importance to others.

Social Maturity

Children with high scores on this scale know how they are supposed to think and feel in a variety of social situations. They have learned the importance of such notions as "fair play", "sharing", "perserverance", "helpfulness", and "generosity". Children with low scores on this scale have not learned these notions and are likely to evidence behaviors that most adults would characterize as selfish, inconsiderate or immature.

School Affiliation

Children with high scores view school as a positive influence in their lives. They enjoy going to school, and they enjoy the activities associated with school. Children with low scores view school as an unhappy place to be. They do not enjoy most school related activities and are negative about the importance of school in their lives.

Self Security

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

Achievement Motivation

This is a special scale, relating achievement and ability to self concept. High scores indicate increased probability that the child will achieve well relative to ability; low scores indicate increased

probability that the child will not achieve as well as might be expected on the basis of his ability. This scale is considered to be experimental, and we recommend that its use for individual assessment be deferred pending the results of our current program of confirmatory analyses.

The Intermediate level of the SOS measures the same five dimensions of children's self concept and adds three additional scales, as follows:

Self Security

Children with high scores report a high level of emotional confidence or stability. They feel that they are in reasonable control of the factors that affect their lives and spend little time worrying over possible troubles. Children with low scores on this scale worry a great deal. They are concerned that something bad may happen and report feelings of nervousness.

Teacher Affiliation

Children with high scores on this scale like their teachers. They see the teacher as helpful, attentive, understanding and generous. Children with low scores on this scale see the teacher as arbitrary, inconsiderate of children, and/or a source of emotional pain.

Peer Affiliation

Children with high scores on this scale consider their relationships with other children to be both of high quality and of considerable importance to them. They see themselves as approved of and valued by their peers. They like to be with other children. Children with low scores do not see their peer relationships as an asset. They see other

children as unfriendly, they have few friends, and do not accept the responsibilities of friendship easily.

Scoring of the SOS is based on national norms. For each scale, a child receives a standard score (T score), representing a distribution with a mean of 50 and a standard deviation of 10. National percentile and stanine equivalents of this standard score also are provided. Responses to individual items are not given.

The Primary Level of the SOS was given to the student sample at grade 2 and the Intermediate Level to grade 5 in the Spring of 1975. Table 1 presents the results of the Primary SOS.

Based on standard scores having a mean of 50 and a standard deviation of 10, these results indicate that:

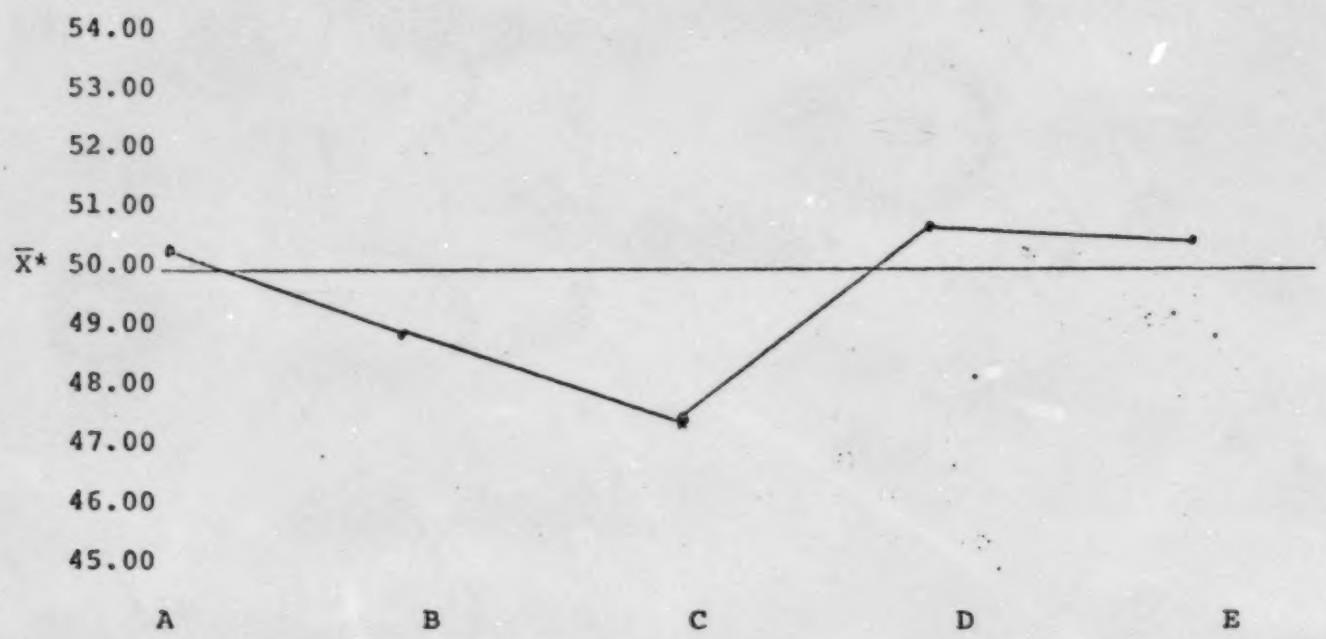
- Bedford primary career education students appear to have slightly lower scores in Self Acceptance than the national norm group.
- Bedford primary career education students schieve higher scores in Self Security than the national norm group.
- Bedford primary career education students achieve higher scores in Achievement Motivation than the national norm group.
- Bedford primary career education students achieve slightly lower scores in Social Maturity than the national norm group.

The preceding data should be viewed as tentative, since final conclusions can not be presented until post testing is completed next year.

TABLE 1

Bedford Career Awareness
1974-1975
Primary Self Observation Scales
for Experimental and Control Groups
Means and Standard Deviations
Grade 2 N = 252

		$\bar{X}$	S. D.
A.	Self Acceptance	50.17	9.06
B.	Social Maturity	48.86	9.51
C.	School Affiliation	47.18	12.02
D.	Self Security	50.53	9.43
E.	Achievement Motivation	50.23	9.68



*50.00 is mean "T" with a forced S. D. of 10 based on normative procedures

Legend: _____ Career Education Group

Results of SOS Intermediate Level are presented in Table 2. An examination of these tables reveals that:

- Intermediate students in the Bedford career education classes obtain higher scores than the norming group in: Self Acceptance, Self Security, Social Confidence, Peer Affiliation and Achievement Motivation.
- Intermediate students appear below the norming group in Social Maturity, School Affiliation, and Teacher Affiliation.

The preceding data should be viewed as tentative since final conclusions can not be presented until post - testing is completed next year.

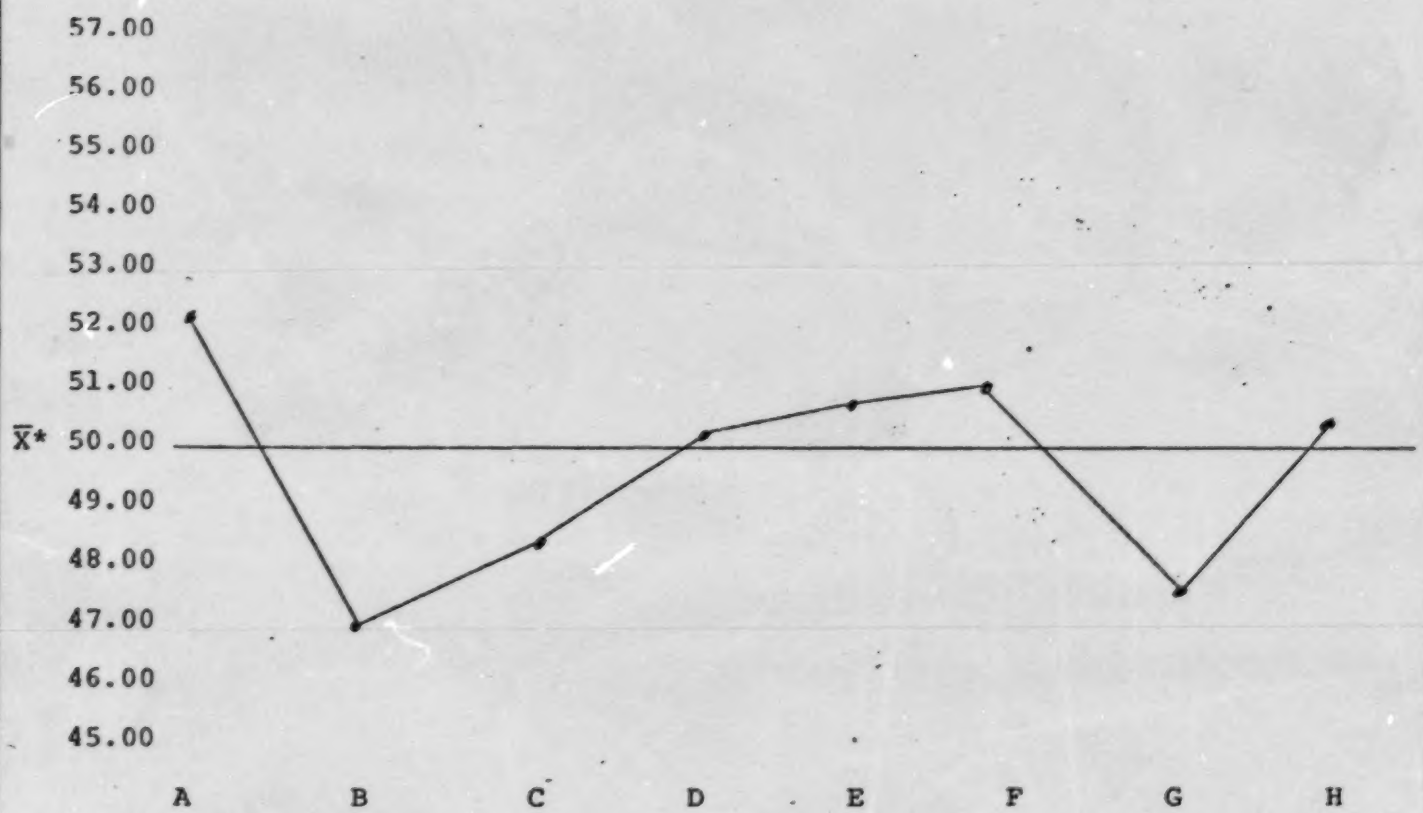
TABLE 2

Bedford Career Awareness Program

1974-75

Intermediate Self Observation Scales
for Experimental and Control Groups
Means and Standard Deviations
Grade 5 N=333

		$\bar{X}$	S. D.
A.	Self Acceptance	51.23	9.81
B.	Social Maturity	46.68	9.84
C.	School Affiliation	48.50	11.03
D.	Self Security	50.04	9.65
E.	Social Confidence	50.51	11.08
F.	Peer Affiliation	50.93	9.07
G.	Teacher Affiliation	48.98	10.16
H.	Achievement Motivation	50.81	5.23



*50.00 is a mean "T" with a forced S.D. of 10 based on normative procedures.

Legend: _____ Career Education Group

Student Relationships With the World of Work

One of the evaluation questions asks "How do Project students perceive the world of work and their relationship to it?"

One instrument was used to assess this area this year - the Occupational Awareness Survey (OAS).* This instrument was developed by IBEX and has been utilized as an evaluation instrument for the past two years.

Students are requested to select 10 jobs from a set of "want ads" representing various occupational clusters. At the Primary Level there are 24 want ads; and at the Elementary Level there are 43.

The survey is scored by job, not by students. That is, a Job Awareness Quotient (JAQ) is calculated for each job, based on (1) the actual percentage of students selecting the job and (2) the expected percentage. A JAQ of 100 represents the expected percentage of students selecting a given job, assuming all jobs have equal probability of selection. A JAQ of 200 represents a job selected twice as frequently as expected; while a JAQ of 50 represents a job selected only half as often.

A review of overall Project scores at each level reveals a good deal about the knowledge and values of the students. Although not all job clusters are represented in the survey, the students' relative ranking of jobs presents a picture of the work as seen through the students' eyes.

Jobs at the extreme of the ranking (above 150 and below 50) are programmatically important. The Police Cadet was predictable for

* The Occupational Awareness Survey (OAS) was substituted for the Career Education Questionnaire (CEQ).

younger children (164.6 at the Primary Level and 194.2 at the Elementary Level). However, Park Guide (242.8) and Factory Worker were something of a surprise. At the lower extreme, Medical Assistant (34.5 at the Elementary level) and Minister (89.1 at the Primary level) were lower than expected.

In any case, the OAS should provide useful data for program design and assessment. The grade level results show that the ranking some jobs follow a pattern. "Teacher", "Farm Worker", and "Secretary" hold fairly steady across all grades.

It should be remembered that the purpose of the Bedford project is not to have young children make job choices for their future, rather it is to make all students aware of more occupations.

TABLE 3

Bedford Career Awareness Program

1974-75

Primary Occupation Awareness Survey
Grade 2

JAQ's of Students Elected to Respond to Designated Want Ads

	JAQ Program Students		JAQ Program Students
Doctor	150.8	House to House Salesman	123.4
Teacher	150.8	Sales Clerk	96.0
Tickets/local theater	96.0	Factory Worker	41.1
Secretary	123.4	Cook/McDonald's	164.6
Hotel Manager	89.1	Taxi Driver	54.8
Supermarket Cashier	123.4	Writer/"Motor Trend"	68.6
Police Cadet	164.6	Airline Pilot	82.3
Minister	89.1	House Cleaner	68.6
Truck Driver	144.0	Radio Announcer	82.2
Airline Ticket Sales	130.3	Auto Mechanic	54.9
Farm Worker	130.3	Actor or Actress	68.6
		Fireman	109.7
		School Custodian	61.7

* Job Awareness Quotient - JAQ of 100 represents the expected percentage of students selecting a given job, assuming all jobs have equal probability of selection. A JAQ of 200 represents a job selection twice as frequently as expected; while a JAQ of 50 represents a job selected only half as often.

TABLE 4

Bedford Career Awareness Program
1974-75

Elementary Occupational Awareness Survey
Grade 5 N = 62

JAQ's of Students Elected to Respond to Designated Want Ads

	JAQ Program Students		JAQ Program Students
Doctor	97.11	House-to-House Salesman	48.6
Florist	76.31	Insurance Clerk	76.3
Child Care	131.81	Dental Assistant	48.6
Printer	98.2	Manager-Travel Agency	110.9
Teacher	160.0	Sales Clerk	69.4
Sanitation Worker	55.5	Factory Worker	228.9
Usher	62.43	Cook/McDonald's	69.37
Bookkeeper	131.8	Taxi Driver	27.7
Secretary	118.0	Law Aide	62.4
Stock CLerk	97.1	Writer/Motor Trend	159.5
Park Guide	242.8	Airline Pilot	48.6
Hotel Manager	55.5	House Cleaner	90.2
Plumber	48.6	Radio Announcer	90.2
Switchboard Operator	97.2	Auto Mechanic	7.4
Supermarket Cashier	166.5	Brick Mason	117.9
Police Cadet	194.2	Game Warden	62.4
Minister	83.2	Medical Assistant	34.5
Truck Driver	180.4	School Custodian	90.2
Airline Ticket Sales	104.0	Actor or Actress	118.0
Farm Worker	215.1	Accountant	90.2
Fashion Designer	69.37	Photographer	83.2
Editor	83.2		

We recommended that the activities selected be included on the survey to be a guide to inservice education planners. Teachers use the techniques and practices that they are secure and comfortable in using. Staff development is the component of the project to assist teachers in initiating new practices.

STUDENTS' CAREER AWARENESS

The instrument which was utilized to assess upper grade students' perceptions of the world of work (and their relation with it) was the Career Maturity Inventory.

This instrument was developed to measure (1) the maturity of attitudes and competencies that are critical in realistic career decision making, (2) the ability of students to appraise their job-related capabilities, and (3) the aspiration level of students (more carefully defined as economic understanding of each job).

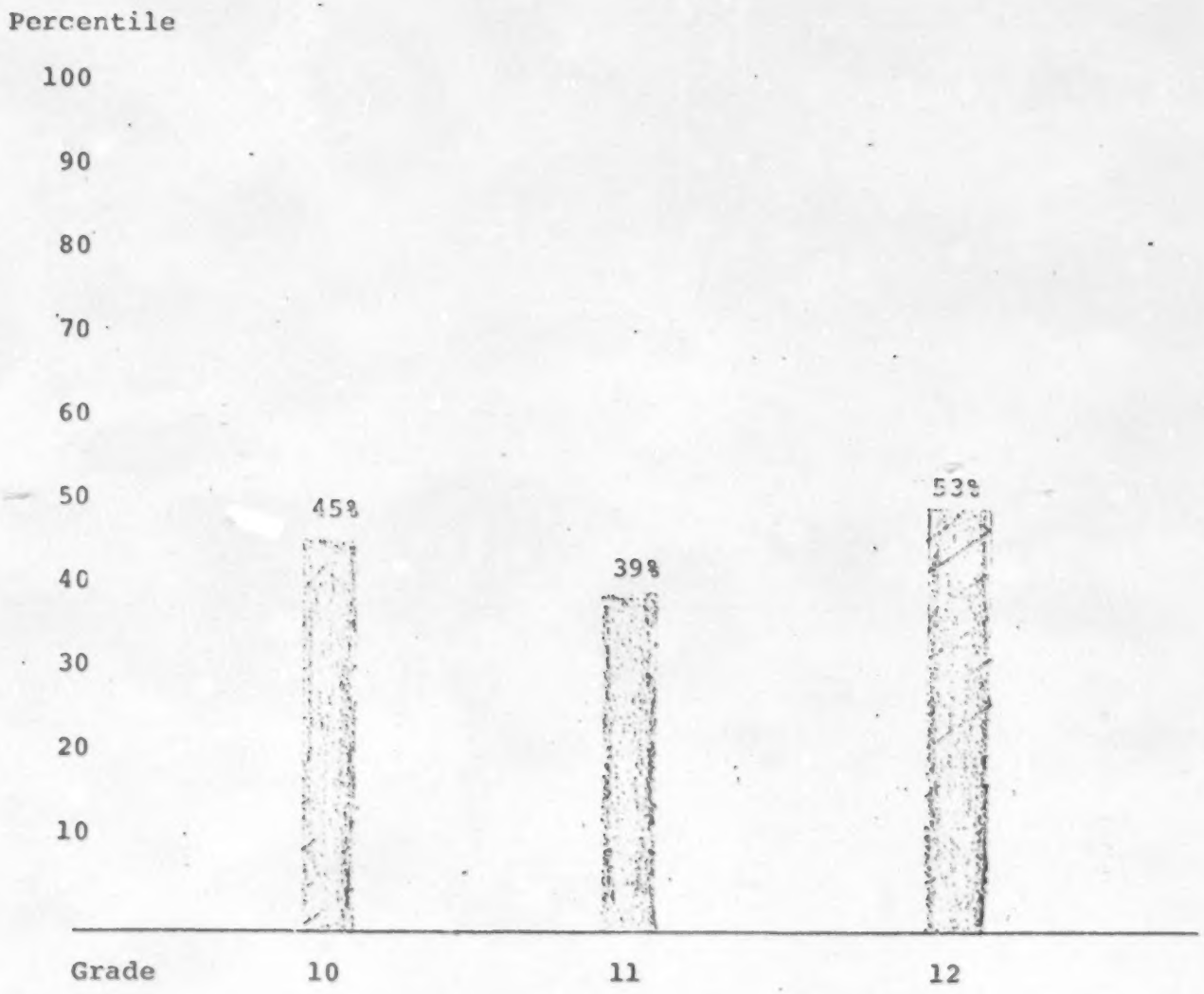
Each of the three CMI subtests employs a series of multiple choice items. Scores on each scale are converted from a raw score to a national percentile.

It is unfortunate that the number of project students taking the CMI was not larger, to allow the statement of a more definite conclusion, concerning the test data. Since the CMI norms are not true national norms and as the N size for the project students is small, the following are tentative conclusions.

- High school career education students (grades 10 - 12) need additional practical knowledge of the world of work.
- High school career education students appear to exhibit a minor gain in the ability to focus upon goal selection, planning and problem solving.

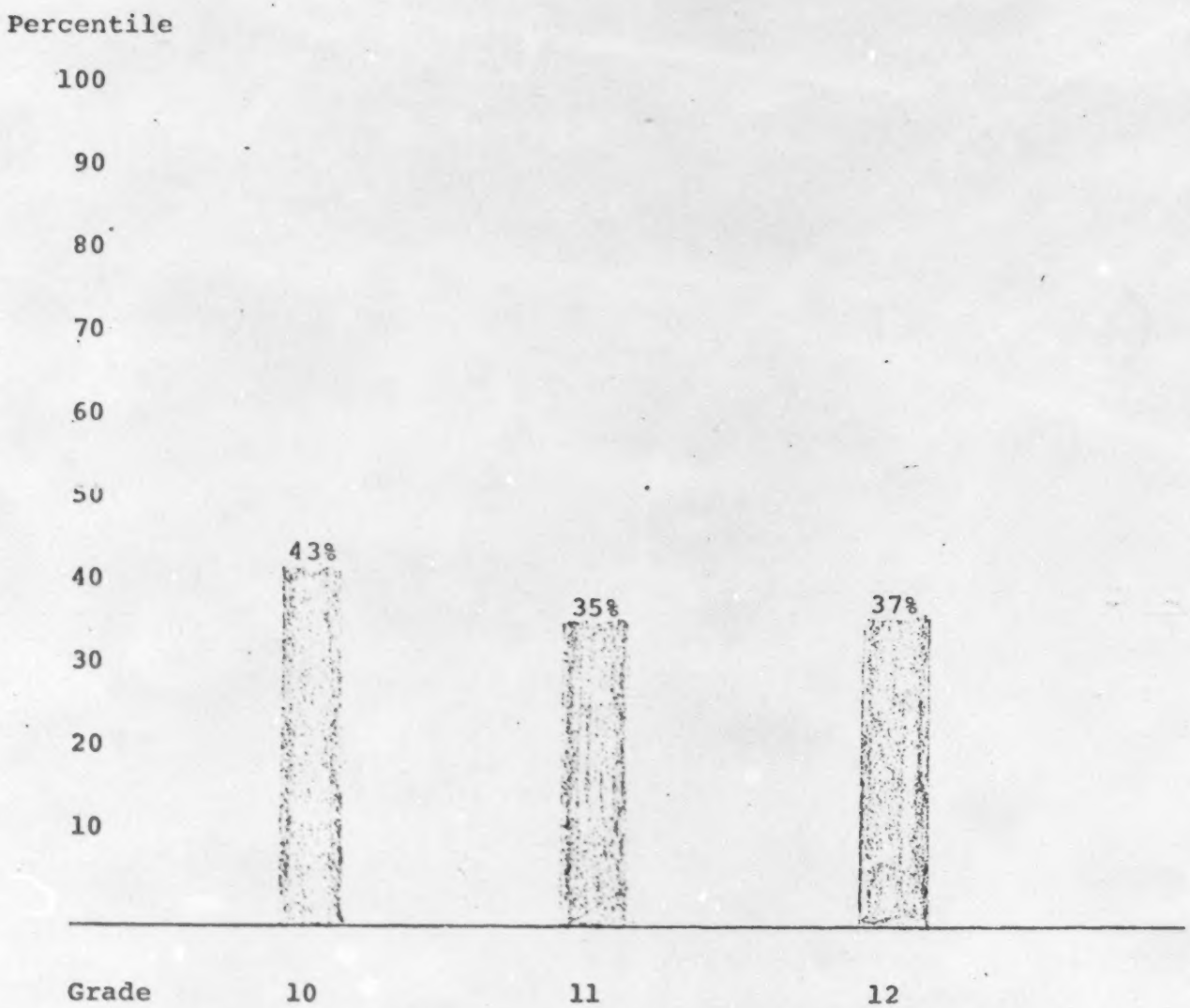
BEDFORD CAREER AWARENESS PROGRAM
1974-75

CAREER MATURITY INVENTORY
CHOOSING A JOB
GRADES 10,11,12



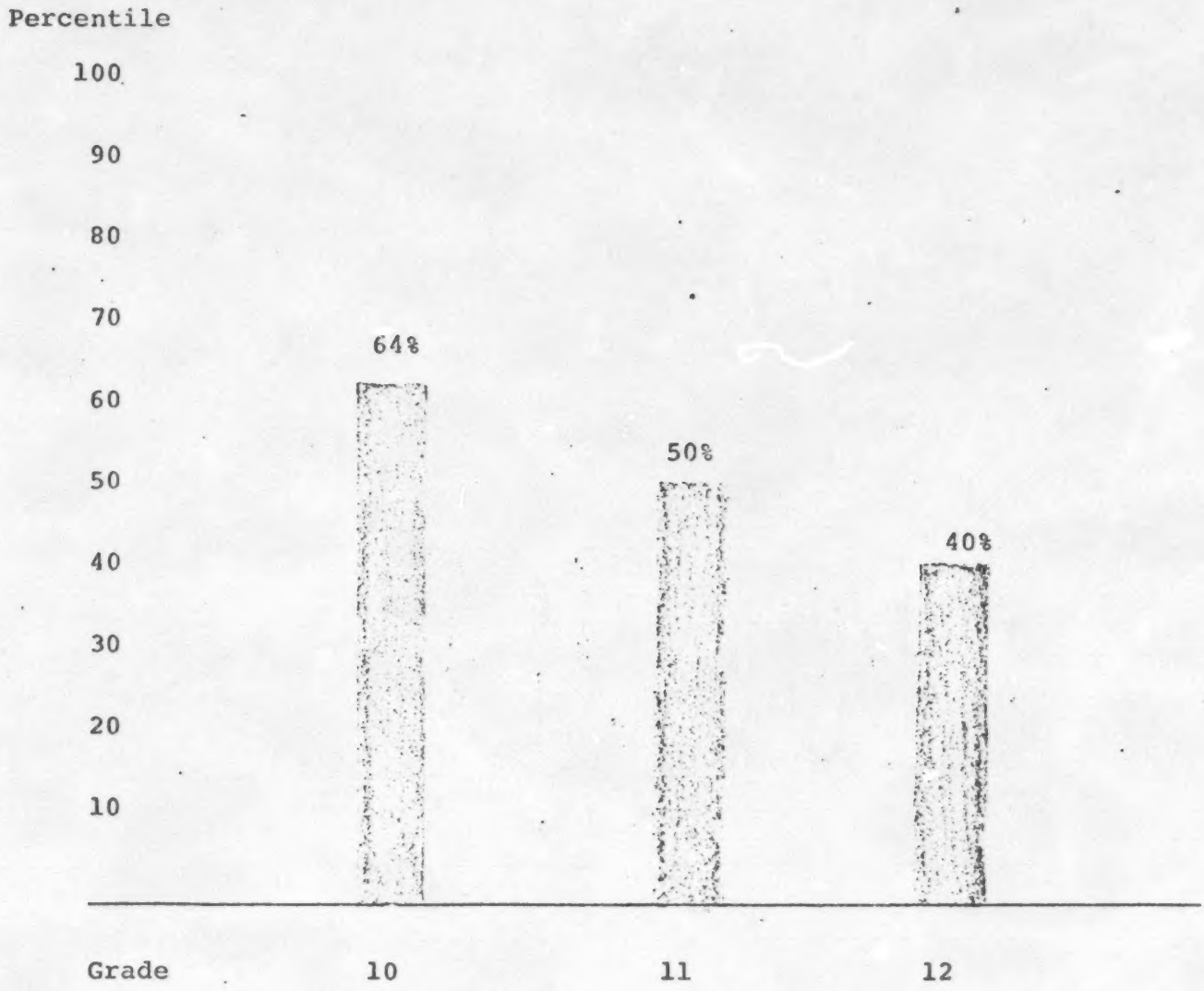
BEDFORD CAREER AWARENESS PROGRAM
1974-75

CAREER MATURITY INVENTORY
LOOKING AHEAD
GRADES 10,11,12



BEDFORD CAREER AWARENESS PROGRAM
1974-75

CAREER MATURITY INVENTORY
WHAT SHOULD THEY DO?
GRADES 10, 11, 12



TEACHER OUTCOMES

In order to respond to evaluation questions concerned with the teacher's role in the career development project, the teachers were requested to fill out the Teacher Practices Survey.

The Career Education Teacher Survey was completed by all of the teachers participating in the project. Each practice must be viewed separately in order to interpret the results of the survey. Obviously, some practices such as video taping of career education activities are used only occasionally and others, such as integration of basic skills with career education, should be daily activities. Activities such as use of library resources related to careers and displays concerning careers and jobs would be considered good if utilized once a month. Each practice is presented along with the presentation of responses in each category.

An inspection of the following table reveals that the most often expressed practice among participating teachers is the integration of basic skills with career education, one of the basic concepts recommended by the project. Generally, the utilization of the various career education practices seems to fall into reasonable ranges for the practices presented. Teachers are using the concepts and practices of the career education program in their classrooms.

There are particular areas that need attention in the staff development phase of the program. Fifty-four percent of the respondents never use Career Education Programs through Educational television. Although this is low, we recognize that many schools

may not have the necessary equipment to utilize this activity. Other activities that teachers seem to need is more assistance in using:

(a) visits to or by self employed persons.

(b) displays concerning careers and jobs.

(c) other uses of community resources (e.g., donations and gifts).

CAREER AWARENESS TEACHERS' PRACTICE

Number of Responses by Categories for Each Item

	Daily	Atleast Once A Week	Atleast Once A Month	A few times during year	Never
. Integration of basic skills with career education	15	21	4	23	2
. Use of library resources related to careers	2	12	16	26	6
. Interrelation of concepts and careers	12	14	15	19	2
. Use of video taping of career education activities	-	1	6	34	30
. Class presentation of career opportunities	3	9	17	27	7
. Displays concerning careers and jobs	3	5	16	29	12
. Group discussions of careers and job opportunities	3	12	18	24	6
. Pupil selection of career field of interest	3	-	13	32	11
. Newspaper ads and magazines related to job opportunities	1	3	11	20	23
. Career education materials	4	10	25	22	7
. Career-related role playing and simulations	1	5	9	28	14
. Joint planning of activities with Career Education project staff	-	5	14	24	20
. Career education films or filmstrips	1	6	3	19	15
. Visits to factories, businesses or self-employed persons	-	-	3	38	20
. Career Education through educational T.V. Programs	-	3	4	22	35

COST ANALYSIS

The cost analysis of Bedfords' Career Education Project presented some minor problems. The primary problem was that the cost data that was provided was not broken down sufficiently to enable the evaluator to attribute specific student gains to specific expenditure amounts. All that follows, then is an initial effort on the evaluators' part to gain some sense of grade level expenditure.

We have divided the school population, grades K-7, 8-9, 10-12, which correspond to the elementary, Junior high and Senior high division in the Bedford school system. Program costs were attributable to these three groups and were identifiable in the data provided.

It is apparent from the following chart that the major portion of the funds were expended at two grade divisions, K-7 and 10-12. What is not, and will not be apparent until the next year's evaluation, is whether this expenditure pattern results in increased student gains. We have broken down the program expenditures into three arbitrary categories. The categories are: (1) costs identifiable to specific grade level, (2) disadvantaged program personnel costs, and (3) costs which are whole program loaded.

EXPENDED BUDGET

(1). Grade Level Expenditures

Grades	K-7	8 - 9	10-12
Personnel	70,000.00	-	11,300.00
Supplies & Materials	4,080.00	-	1,000.00
Equipment	4,132.00	-	-
Other Direct Costs	7,000.00	-	-
SUBTOTAL	85,212.00		12,300.00
TOTAL GRADE ATTRIBUTABLE COSTS			97,512.00

(2). Disadvantaged Program

Personnel Costs (TOTAL)	18,000.00

(3). Gross Program Costs

Project Director	13,500.00		
Consultants to Project	1,000.00		
Secretary	4,500.00		
Employee Benefits	13,313.00		
Travel	500.00		
Communications	600.00		
Program Services			
Evaluation	6,800.00		
Other	4,950.00		
Reproduction	200.00		
SUBTOTAL	45,363.00	TOTAL	45,363.00

Total Program Funds Expended 160,875.00

Conclusions and Recommendations

IBEX shared the certain evaluation functions with the Project staff. This provided an effective allocation of resources, while maintaining IBEX's independent review of all project activites.

Based on the results of the 1974-75 evaluation, the evaluation team offers the following conclusions and recommendations:

- Much of the information obtained during this project year must be considered as baseline data and as input to project planning and management functions. The evidence relating self concept, ability, and achievement is supported by IBEX's research with other projects, and it has broad implications for program design management; therefore, we recommend that this area of evaluation be given high priority in the future.
- The evaluation data relating to the students' perceptions of the world of work should be studied carefully and used to plan future program activities. The existing instruments can be reviewed and modified to reflect specific career fields most relevant to the Bedford community.
- A Decision Making Scale, developed by IBEX and field tested in a number of career education projects last year, should be used with Project students next year to assess the impact of the Project on the strategies used in making decisions.

- Continuing structured feedback should be obtained from teachers, students and the community, to assess their attitudes and to obtain their inputs regarding the planning and implementation of specific activities.
- Testing of a large group of pupils involved in the Career Education project will improve the integrity of the data.